Storage Task Force Meeting 1 Summary August 1, 2000

Problem Statement

- Timing of Runoff in state is not in sync with demand.
- Population growth across state putting more pressure on water supply
- Demand is higher than supply; economy, growth, and ESA are issues
- Endangered fish need more water in river
- If you don't have enough you have to "make water": water conservation; water reuse, move water, or store water. The task force is focusing on the water storage issue.
- Providing new storage is not a panacea

Types of Storage

Surface Storage

- Little chance of building new, on-channel dams on rivers due to environmental concerns, public opposition
- Raising existing dams may be cheapest and most environmentally acceptable way of increasing reservoir storage
- If new storage dams are needed, off-channel projects are the more environmentally sensitive alternative. However, they can be expensive to build and operate.

Aquifer Storage

 Aquifer storage and recovery is a more environmentally friendly method, but can be used only in limited areas where the geology is favorable.

Flood Control & Stormwater Management

- Flood control storage can help reduce downstream flooding on major rivers
- However, flood control needs tend to interfere with water storage needs for other uses.
- Stormwater management is a major problem in developing areas, reduces groundwater recharge, and increases flooding.
- Groundwater Recharge is critical for maintaining streamflow in summer
- Increasing infiltration and/or storage of stormwater can improve groundwater recharge

Benefits/Drawbacks of Storage for Different Interests

Fish and wildlife issues:

Additional storage can be used to benefit fish and wildlife, but following concerns must be met:

- Direct habitat losses through inundation.
- Upstream and downstream fish passage.
- Changes in natural stream dynamics changes in instream flows, seasonal changes, diurnal changes.
- Water quality impacts e.g. dissolved gases and temperature.
- Timing of water capture is critical to fish

Irrigator Interests:

- There are more and more demands being placed on volume available.
- Demands often conflict with irrigation needs
- They need more storage to provide flexibility in meeting these competing needs.

Benefits/Drawbacks of Storage for Different Interests

Municipal Water Suppliers

- Utilities have a strong history that shows the benefit of storage.
- Storage is a benefit to meet future growth.
- More is going to be needed over the next 100 years.
- However, storage may be difficult for smaller utilities to afford

Corps of Engineers

- Existing dams must be watched as conditions change.
- The number of dams that have populations below them is increasing. Must be able to develop a plan of action of deal with this.

Benefits/Drawbacks of Storage for Different Interests

Funding/Financing Issues

- Water storage projects can be very expensive to construct, ranging from \$500 per acre-foot to over \$5000 per acre-foot of storage
- These costs are too great for most private groups to handle alone – some sort of public financing grants/loans will be necessary
- Financing these projects is going to be the biggest stumbling block.